

cate, the disk luteo-testaceous, broadly margined behind with fuscous, the lateral lobes shallow, fuscous, with an oblique elliptical luteous patch at the lower anterior angle. Tegmina considerably longer than head and pronotum together, apically truncate, testaceous more or less infumated, the veins luteous, the mediastinal vein one- or two-branched; wings apparently aborted. Legs pale luteous, slightly flecked with fuscous, the auditory tympanum on inner side of fore tibiae wanting, the hind tibiae somewhat more than two thirds as long as the hind femora, with five rather long and slender spines on either margin above.

Length of body, 13 mm.; pronotum, 2.5 mm.; breadth of head, 3.75 mm.; of pronotum at front margin, 3.5 mm.; length of tegmina, 5.6 mm.; of hind femora, 10 mm.; hind tibiae, 7 mm.

1 ♂, Biscayne Bay, Fla. (Mrs. A. T. Slosson).

This species is remarkable for the transverse effect of the markings of the front of the body and has relatively longer hind tibiae than the other species.

Miogryllus sicarius sp. nov.

A light-colored slender species. Head testaceous with a large vertical fuscous patch

extending from the hinder edge of the antennae backward, but not reaching the eyes, and containing two slender longitudinal testaceous stripes. Pronotum about half as broad again as long, equal in breadth throughout, the hind margin feebly sinuous, the whole testaceous considerably blotched with transverse patches of fuscous on the disk, the lateral carinae marked posteriorly with fuscous, the lower margin of the lateral lobes and the hind margin of the disk feebly edged with fuscous. Tegmina testaceous, fully as long as head and pronotum together, not apically truncate, the mediastinal vein unbranched; wings exceedingly long, extending backward when at rest about as far as the outstretched hind legs. Legs testaceous, the auditory foramen on inner side of the fore tibiae small but distinct, short oval; hind tibiae about two thirds as long as hind femora, with four spines on the inner, five on outer row; ovipositor twice as long as hind tibiae.

Length of body, 13 mm.; pronotum, 2.25 mm.; breadth of head, 3.5 mm.; pronotum, 3.5 mm.; length of tegmina, 6 mm.; hind femora, 7.75 mm.; hind tibiae, 5 mm.; ovipositor, 10 mm.

1 ♀, San Diego (Uhler).

This is the only species which has a distinct auditory foramen on the fore tibiae.

KERMES QUERCUS LINN.

BY GEO. B. KING, LAWRENCE, MASS.

Just recently Dr. L. Reh, of Hamburg, Germany, sent me some scale insects for names. In one vial, to my surprise and with much pleasure, I

found a scale insect which seems to have been involved in obscurity for over a century and is here technically described for the first time.

Kermes quercus L. 1758.

Coccus quercus L. 1758.

Chermes quercus reniformis Geoff. 1762.

Coccus quercus roboris L.

♀ scale shiny, subglobular in shape, emarginated posteriorly, which makes the scale in some individuals appear kidney shaped, variable in size, $3\frac{1}{2}$ mm. long 3 wide, 3 high, some much smaller. Color red-brown, with transverse broken black bands.

Young ♀ larvae gray-brown, elongate oval very small. Spread under a cover-glass 520 micromillimeters long and 260 broad. The skin is clear, with a yellowish tinge, quite thickly beset with indistinct short sharp spines 8μ long, and four longitudinal rows of glandiform spines, practically the same as those found in *Pseudolecanium californicum* Parrott. Between and in front of the antennae are two ordinary spines 16μ long. Caudal tubercles small, each with one long bristle 180μ long, one spine-like hair 40μ long, one short spine 16μ long and one glandiform spine. A little distance above the anal orifice are two ordinary spines 16μ long.

Antennae 6 jointed, measuring in μ as follows:

Joint	1	2	3	4	5	6	
	20	20	20	12	20	28	Formula 6(1235)4
	24	20	20	12	16	28	" 6(1123)54.

All the joints have short thin hairs.

Middle legs short, stout. Coxa, 20. Femur with trochanter, 80. Tibia, 36. Tarsus, 40. Claw 20μ long.

The above described examples were found by Dr. L. Reh on *Quercus* sp. at Borstel near Hamburg, Sept. 18, 1899. Its nearest North American ally is *Kermes pubescens* Bogue and belongs in *galliformis* section.

Bibliographical notes.—Linné, Syst.

Nat. vol. 2, 1806, p. 712. No description is given, but cites Reaum. Ins. 4, tab. 6, fig. 1-4, and gives the food plant as *Quercus robur*.

Geoffroy Histoire abrégée des Insectes. vol. 1, 1762, p. 508 says *Chermes quercus reniformis*. Reaumur, Ins. 4, tab. 6, fig. 1. Le *Kermes reniforme* du Chêne (the *reniform* *Kermes* of the oak). Its form differs from that of all the others, it approaches the figure of a kidney. As to its color it is brown.

Fabricius, Systema Entomologiae, 1775, p. 743, says *Coccus quercus roboris* Linn. Syst. Nat., vol. 2, p. 740-5. Faun. succ. 1016, *Chermes quercus reniformis*. Geoff. Ins. vol. 1, p. 508-13. Reaum. Ins. 4, tab. 6, fig. 1-4. Habitat in *quercus robore*.

Dr. George Dimmock has a copy of Reaumur's work which belonged to Jacques Brez, who was a preacher in Widdelverg, Holland (born 1771, died 1798) author of *La flore des insectophiles*, "which gives a list of insects according to the food plants they attack." In this Reaumur he had written names against all the species he could recognize, and he marked on plate 6, fig. 1-4. *Coccus quercus* Fabr. [= *Chermes quercus* L.] Dr. Dimmock tells me that Mr. Brez wrote in French and began publishing on insects at the age of 19, and died at 27. Signoret in *Essai sur les Cochenilles* gives the food plant as *Quercus pedunculata*.

In Proc. acad. nat. sci. Phil., 1899, p. 270, by Prof. Cockerell are some notes on *Kermes*.